IN THE CLAIMS:

Please cancel claims 1-13 without prejudice or disclaimer, and substitute new Claims 14-26 therefor as follows:

Claims 1-13 (Cancelled).

14. (New) A method for producing a cable comprising:

at least one transmissive element; and

an expanded and cross-linked coating layer in a radially outer position with respect to said at least one transmissive element, said coating layer comprising a composition including an expandable cross-linkable polymeric material;

said method comprising the steps of:

a) extruding said composition;

b) forming a coating layer made of expandable and cross-linkable polymeric material with the composition thus extruded;

c) expanding said coating layer made of expandable and cross-linkable polymeric material; and

d) cross-linking said coating layer made of expandable and cross-linkable polymeric material;

said expanding and cross-linking steps c) and d) being carried out by heating said coating layer made of expandable and cross-linkable polymeric material at atmospheric pressure by means of a heating fluid.

15. (New) The method according to claim 14, wherein said heating fluid is subjected to forced circulation.

16. (New) The method according to claim 14, wherein said heating fluid is subjected to forced circulation at a rate between about 2 and about 80 m/s.

17. (New) The method according to claim 14, wherein said expanding and cross-linking steps c) and d) are carried out by heating said coating layer made of expandable and cross-linkable polymeric material to a temperature between about 120°C and abut 400°C.

18. (New) The method according to claim 14, wherein said heating fluid is selected from the group of air and inert gases.

19. (New) The method according to claim 14, wherein said composition comprises at least one expanding agent and at least one cross-linking agent.

20. (New) The method according to claim 19, wherein said at least one expanding agent and said at least one cross-linking agent have respective decomposition temperatures which differ from each other by at most about 50°C.

21. (New) The method according to claim 19, wherein said at least one cross-linking agent is selected from the group of organic peroxides and sulphur.

22. (New) The method according to claim 21, wherein said at least one cross-linking agent is selected from the group of 2,5-dimethyl-2,5-bis-(ter-butylperoxy)hexane, 2,5-dimethyl-2,5-bis(ter-butylperoxy)hexine-3-di-ter-butylperoxide, bis-(ter-butylperoxyisopropyl)benzene, ter-butylcumylperoxide, dicumylperoxide, 4,4'-di-terbutylperoxy-n-butylvalerate, ter-butylperoxy-3,5,5-trimethylhexanoate, 1,1-di-ter-butylperoxy-3,3,5-trimethylcyclohexane, ter-butylperoxybenzoate, dibenzoylperoxide, bis-(2,4-dichlorobenzoyl)peroxide, bis-(p-chlorobenzoyl) peroxide, 2,2-di-ter-

butylperoxybutane, ethyl-3,3-di-ter-butylperoxybutyrate, and 2,2'-azo-di-(2-acetoxypropane).

23. (New) The method according to claim 19, wherein said at least one expanding agent is selected from the group of oxydibenzyl sulphonhydrazide, azodicarbamide, paratoluene sulphonylhydrazide, and mixtures of organic acids with carbonates and/or bicarbonates.

24. (New) The method according to claim 14, further comprising the step of cooling said cable provided with said expanded and cross-linked coating layer.

25. (New) The method according to claim 14, further comprising the step of providing said cable having said expanded and cross-linked coating layer with a metallic screen.

26. (New) The method according to claim 25, further comprising the step of coating said metallic screen with an outer sheath.